Starting Early Starting Smart
Final Report:

Summary of Findings

July 2003

This document was produced by the *Starting Early Starting Smart* (*SESS*) Steering Committee. The committee and its work have been supported through a cooperative agreement (the Substance Abuse and Mental Health Services Administration (SAMHSA) Grant #: 5 UDI SP08255-03) funded and managed as a public-private partnership between SAMHSA, and two private foundations; the Casey Family Programs (CFP) and the Marguerite Casey Foundation. SAMHSA's three centers—the Center for Substance Abuse Prevention (CSAP), the Center for Substance Abuse Treatment (CSAT), and the Center for Mental Health Services (CMHS)—collaborated internally to provide the public portion of the funding.

Suggested citation:
Springer, J. F., et al. (2003). *Starting Early Starting Smart Final Report: Summary of Findings.* Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Contents

Exhibits

SESS Program Acknowledgments

The Families and Grantees of
Starting Early Starting Smart would like to acknowledge:
Charles G. Curie, M.A., A.C.S.W., Administrator
Substance Abuse and Mental Health Services Administration (SAMHSA)
Rockville, MD
and
Ruth Massinga, M.S., President and CEO
Casey Family Programs (CFP)
Seattle, WA
along with the Casey Board of Trustees and the three SAMHSA Centers—Center for Substance Abuse Prevention, Center for Substance Abuse Treatment, and Center for Mental Health Services—for their vision and commitment to reaching families with very young children who are affected by environments of substance abuse and mental disorders. Without their innovative public-private partnership and unprecedented support, this initiative would not have been possible.
We further acknowledge the early guidance and program development from
Nelba Chavez, Ph.D.; Hildy (Hjermstad) Ayer, M.S.W.; Rose Kittrell, M.S.W.;
Jean McIntosh, M.S.W.; Joe Autry, M.D., M.S.W.
and
Jeanne DiLoreto; Barbara Kelley Duncan, M.Ed.; the Federation of Families for Children's Mental Health;
Karol Kumpfer, Ph.D.; Sue Martone, M.P.A.; Eileen O'Brien, Ph.D.,
Stephania O'Neill, M.S.W.; Patricia Salomon, M.D.;
Velva Taylor Spriggs, M.S.W.; Jocelyn Whitfield, M.A.; and Jacqueline Williams.

In addition, the advisement and investment of the U.S. Department of Education, the Health Resources and Services Administration, the Administration for Children and Families of the U.S. Department of Health and Human Services, and for the *SESS* Extended work, the Marguerite Casey Foundation, were critical in this collaboration effort.

Many thanks to the SAMHSA-Casey Team
for their tenacious efforts and unprecedented collaboration:
Sybil Goldman, M.S.W.
Elaine Parry
Paul Brounstein, Ph.D.
Soledad Sambrano, Ph.D.
Michele Basen, M.P.A.
Patricia Sabry, B.A.
Virginia Pryor, M.S.W.
Peter Pecora, Ph.D.

Members of the authorship team for this report included: J. Fred Springer, Ph.D. and Elizabeth Sale, Ph.D. (EMT Associates, Inc.); Michele Basen, M.P.A. (SAMHSA); and Peter Pecora, Ph.D. (CFP). Steering Committee members included Davis Y. Ja, Ph.D. and Anne Morris, Ph.D., (Asian American Recovery Services, Inc.); Ruth Rose-Jacobs, Sc.D. and Carolyn Seval, R.N., M.P.H., L.M.H.C. (Boston Medical Center); Christopher Blodgett, Ph. D. and Mary Ann Murphy, M.S. (Casey Family Programs); Mark C. Edwards, Ph.D., Carol Amundson Lee M.A., L.P.C.; Leanne Whiteside-Mansell, Ed.D., and Joanne Williams, M. Ed. (Child Development Inc.); Jill G. Joseph, M.D., Ph.D., Amy Lewin, Psy.D., and Michelle J. C. New, Ph.D. (Children's National Medical Center); Philip J. Leaf, Ph.D. and Jocelyn Turner-Musa, Ph.D. (Johns Hopkins University); Irene Jilson, Ph.D. (Policy Research, Inc.); Linda L. Jones, B.A., and Claudia Long, Ph.D. (Tulalip Tribes Beda?chelh); Emmalee S. Bandstra, M.D., K. Lori Hanson, Ph.D., Connie E. Morrow, Ph.D., and April L. Vogel, Ph.D. (University of Miami); Robyn Boustead, M.P.A. and Carol J. Evans, Ph.D. (University of Missouri); Bebeann Bouchard, M.Ed., Richard Boyle, Ph.D., and Andy Hsi, M.D., M.P.H. (University of New Mexico); Margaret P. Freese, Ph.D., M.P.H.; Christa R. Peterson, Ph.D., and Laurel L. Swetnam, M.A., M.S. (University of Nevada); Victor J. Bernstein, Ph.D., Jewell Oates, Ph.D., and Dianne Stansberry, B.A., C.S.A.D.P. (Women's Treatment Center).

***Starting Early Starting Smart* Final Report**

Summary of Findings

…The first five years of life are a time of enormous growth of linguistic, conceptual, social, emotional, and motor competence ...The pace of learning, however, will depend on whether and to what extent the child's inclinations to learn encounter and engage supporting environments. There can be no question that the environment in which a child grows up has a powerful impact on how the child develops and what the child learns.

National Research Council, Committee on Early Childhood Pedagogy[1]

Background

Starting Early Starting Smart (*SESS*) is a national, public-private partnership between the Casey Family Programs (CFP), a private foundation, and the Substance Abuse and Mental Health Services Administration (SAMHSA) in the U.S. Department of Health and Human Services (DHHS).[2] The *SESS* partnership supported the integration of substance abuse and mental health services (hereafter referred to as behavioral health services) into primary health care and early childhood settings serving children ages 0 to 5 and their families and caregivers.

A rapidly accumulating research consensus emphasizes the importance of the early years in setting the trajectory of later youth development, including school readiness and performance (Ladd & Burgess, 1999; Shonkoff, J. & Phillips, D., 2000). Growing knowledge about the opportunities for lasting positive impacts in these years has increased public and professional concern about adequate services in these critical early years of life. *SESS* provides "a 'proving ground' for identifying, refining, and documenting effective practices that engage, involve, and strengthen" family and service environments for young children at high risk (CFP & DHHS, 2001a:7).

During the years 1997-2001, 12 projects were awarded funds to design and implement service integration models and to develop an evaluation strategy to measure outcomes. The projects targeted families with very young children who were at risk for delayed social-emotional, cognitive, and physical development due to risk factors such as caregiver substance abuse, immigrant status, or poverty. To assess the effects of the interventions on caregivers, families, and children across diverse communities,

[1] Bowman, Donovan, & Burns, eds., (2001), p.1.

[2] SAMHSA's three centers—the Center for Substance Abuse Prevention (CSAP), the Center for Substance Abuse Treatment (CSAT), and the Center for Mental Health Services (CMHS)—collaborated internally to provide the public portion of the collaborative funding. The program has also benefited from involvement and advisement of the U.S. Department of Education; the Health Resources and Services Administration, and the Administration for Children and Families of DHHS. Twelve grantees were funded under this collaborative agreement from 1997 to 2001 and this summary contains findings for these grantees over this four-year period. Five of these grantees received additional funding to extend their projects until 2003; these analyses will be presented in future publications.

SAMHSA and CFP also funded and participated in a collaborative, multi-site evaluation that involved all *SESS* programs[3] (collaborating *SESS* organizations are identified in the Appendix). Representatives of the families served in the projects and on the *SESS* Steering Committee to assist with program decisions, recruiting and working with families, and with the evaluation.

This *Summary Report* documents the *SESS* approach to service integration as developed across the participating grantees, reports on the findings from the multi-site evaluation, and documents lessons produced over the four years of the initial *SESS* collaboration.

Major Findings

The *SESS* program had two overarching objectives: to improve access to and use of a comprehensive set of needed services for families/caregivers and young children; and to improve caregiver behavioral health, family functioning, and child social-emotional development and related outcomes. *SESS* projects achieved the following successes with respect to these program objectives.

SESS successfully engaged families by:

- Recruiting families in familiar settings to which caregivers already brought their children for health care or for early childhood education and child care;
- Integrating comprehensive services into host settings through collaboration with relevant providers;[4]
- Increasing access to and use of basic services for families (e.g., transportation, health care, housing, child care, legal services, nutritional services); and
- Increasing access and continued utilization of needed intervention services such as parenting education and consultation, caregiver mental health, child mental health and substance abuse treatment.

SESS programs helped participating caregivers strengthen their home environment by:

- Decreasing drug use among caregivers who were problem users;
- Reducing verbal aggression among caregivers;

[3] The evaluation included a) 1,598 families participating in *SESS* and 1,309 families in comparison or control groups that received the normal standard of care for their site's service setting; b) a comprehensive instrumentation package of proven, published measures where applicable, and applied as uniformly as age and cultural differences across sites would permit; c) a repeated measures design with at least 3 repeated outcome measures, and 5 repeated service use measures per site; and d) measures of caregiver-child interactions coded from video-taped scenarios. Overall, the sites included in this report retained 71.6 percent of their study families at the final data collection point. The evaluation was designed and overseen by the *SESS* Steering Committee composed of principal investigators and evaluators from the projects, representatives of the funders, the Data Coordinating Center, and representatives of participating families.

[4] *SESS* funding was contingent on establishing a coalition of collaborating agencies and providers in support of the *SESS* project. The collaboration was required to include organizations concerned with substance use prevention, substance use treatment, and mental health services. Often, organizations with other relevant interests and service expertise were also involved.

- Decreasing indicators of parental stress among caregivers experiencing high levels of stress; and

- Increasing positive interactions between parents and children.

SESS improved the social-emotional and language development of participating children by:

- Reducing externalizing problems (e.g., aggressive behavior, acting out) and internalizing problems (e.g., withdrawal) in *SESS* classrooms; and

- Improving language development (i.e., receptive language).

The following summary of study findings highlights the accomplishments of the *SESS* program,[5] focusing on the shared characteristics that define the *SESS* interventions and the overall outcomes achieved by all 12 projects.[6]

SESS Interventions and Participants

The *SESS* program invited applications from primary health care centers or early childhood settings because they represent non-stigmatizing places where parents already take their children for service. Five *SESS* programs were in primary care settings; seven were in early childhood settings, five of which were Head Start programs.

The primary care and early childhood settings provided opportunities to engage families of participating children between 0 and 5 years of age. However, these opportunities varied from site to site, and providers had to adapt their activities to suit the local context. For example, children were bussed to one early childhood site, and the program relied on home visits to establish personal contact with families.

The majority of children in the primary care sites were less than 2 years old when their family entered the program. Children in early childhood sites were almost always between 3 and 5 years old. As displayed in Exhibit 1, the study included a population diverse in racial and ethnic identification. Three sites primarily served families that had recently immigrated.

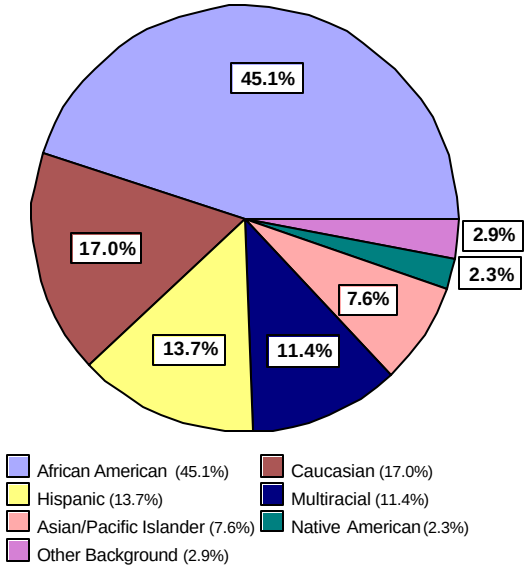
[5] The *SESS* program and projects, the multi-site evaluation method, and the study findings are discussed in more detail in *The National Cross-site Evaluation of the Starting Early Starting Smart Program: Final Report.*

[6] Programs may be excluded from specific analyses because the indicator being reported was viewed locally as not culturally appropriate, was not age-appropriate, or was not viewed as appropriate to other specific characteristics of the target population in a site.

Exhibit 1

Race and Ethnic Background of All Participants

***n* = 2,907**



SESS study families were in a variety of circumstances. Approximately 4 in 10 of the caregivers with primary responsibility for the participating child had less than 12 years of schoolroom education; just over half were single parents; and fewer than half were employed. As a group, they were in a disadvantaged circumstance with respect to accessing services. For example, over 29 percent of the *SESS* study caregivers had no health insurance, compared to 18 percent of the American adult population. More than 1 in 12 *SESS* study caregivers had been homeless at some point in the year before entering the program, compared to approximately 1 in 100 adults nationally.[7]

The SESS Service Package

SESS projects developed locally appropriate service packages with common components of integrated caregiver, family, and child services to support the positive development of infants and young children. *SESS* projects differed from other service integration programs serving young children in important ways. First, *SESS* engaged families and integrated services in familiar settings to which caregivers already brought their children for health care, early childhood education, or childcare. Second, *SESS* projects were much more than assessment and referral systems. They wove assessment, referral, and, most importantly, service delivery itself into the daily fabric of activity in early childhood and health care settings. Third, *SESS* projects focused on successfully engaging families, and on creating a program environment that kept families involved. Fourth, *SESS* projects put the family at the center of the service program, and involved family members in the identification of needs and the development of solutions, often including participation in the governance of the programs themselves.[8]

---

[7] Data from the 2000 U.S. Census report 280,527 homeless people out of a total population of 281,421,906. (U.S. Bureau of the Census, 2000).

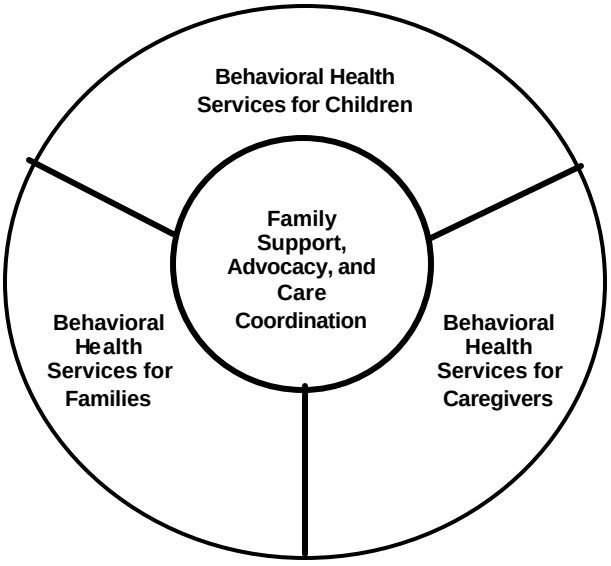
[8] For a discussion of the specific ways in which SESS projects implement these distinguishing characteristics, see CFP & SAMHSA, 2001a, particularly pp. 7-18.

While *SESS* sites worked with coalitions of providers, their particular focus was on blending service delivery, particularly with respect to parenting and children's social and emotional development, into the service setting itself. While referrals to external, specialized services were made when individual needs required this, the emphasis was on making the entire setting more sensitive and responsive to the importance of strong familial and institutional support of healthy social-emotional and cognitive development of infants and young children.

Exhibit 2 summarizes the major components of a *SESS* service package. *SESS* sites developed strong care coordination for families, caregivers, and children. Coordinated services included, but were not limited to: substance abuse treatment, mental health services, conflict and stress reduction, parenting skills, positive interaction skills, learning stimulation and opportunities to promote both social-emotional and cognitive development.

Exhibit 2

The *SESS* Service Package



Strengthening a broad range of environmental and individual supports for very young children at risk requires services that "reflect a range of intensities, from those that promote emotional health to early intervention to treatment strategies" (Knitzer, 2001:4). The core services developed by *SESS* projects were designed to provide this necessary range of intensity.

Family Support, Advocacy, and Care Coordination

Services designed to build close ties to families lay at the heart of the *SESS* service network. These services supported access to and utilization of needed services through advocacy and coordinating activities. This link to the families, and the way in which it was fashioned, was among the most important defining characteristics of the *SESS* approach to delivering services.

Through education and close collaboration, *SESS* staff supported caregivers in developing skills and confidence in advocating for their children. These skills supported greater awareness of child and family needs, greater involvement in schools, and more intensive use of helping services. In addition, the *SESS* program actively supported the involvement of *SESS* caregivers in meetings and activities with the *SESS* Family Institute (CFP & DHHS, 2001c).

Care coordination also exemplified the *SESS* approach of "building trust and rapport with families through an ongoing, supportive relationship" (CFP & DHHS, 2001a:15). Supportive care coordination was accomplished in two major ways:

- Care coordination in *SESS* programs often involved "a central person who is in frequent contact with the family through telephone calls, home visits, and meetings on site and elsewhere in the community" (Hanson, et al., 2001:15). In *SESS* programs, these care coordinators were most often paraprofessionals closely tied to multidisciplinary teams of behavioral health professionals.

  In some programs, *SESS* care coordinators made regular home visits to maintain the personal relation they developed with the family. Home visits might include consultation and information on home environment and parenting issues, as well as ongoing identification of family needs. In other programs, care coordinators would be integrated into the host setting, and interact with families on site. In either case, the care coordination process was responsive and interactive, flowing into the variety of host setting and *SESS* services that may be necessary to meet the families' needs.

- Care coordination in *SESS* programs was achieved through helping primary care and early childhood education centers strengthen capacity as "caring communities" in which families had access to consultation, co-located and convenient services, educational and informational resources, and social support in a respectful, non-stigmatizing environment.

  Many integrated services programs used the host setting as a place to conduct individual assessment, develop a package of planned services, and referred the client to service providers that would address those needs. *SESS* approached the host setting in a more comprehensive way, seeing the childhood program or health clinic as a location of ongoing assessment, service, and support. The objective was to make the setting an ongoing resource for participating families, a resource that was sensitive to family environment and behavioral health needs, and that emphasized the central importance of the social-emotional development needs of infants, toddlers and preschoolers.

  To do this, *SESS* staff formed an interactive partnership with the host setting. For example, they created work groups that became part of the host setting, and brought skills and services into the daily activities of that setting. In one program, *SESS* staff participated in three different workgroups. In a classroom workgroup, a *SESS* early childhood development and psychology expert worked two hours a week with each program classroom teacher during school hours, and provided consultation to the teachers. A staff work group involved paraprofessional care coordinators and professional clinical staff in weekly meetings for consultation about family and child needs. A multidisciplinary team met monthly at each participating school to discuss specific cases and service strategies and policies. This team included *SESS* family support staff, *SESS* clinical experts, classroom teachers, and host setting (Head Start) clinical staff. In addition to regular work groups, *SESS* programs also provided training and technical assistance to host

staff, focusing on caregiver behavioral health, family environment, and child development. These levels of institutional involvement typify the *SESS* approach and made it distinct from many other service integration models.

SESS programs also worked explicitly with families and host settings to strengthen their interaction and mutual support. For example, one site used the Families and Schools Together (FAST) curriculum to strengthen the collaborative and supportive interaction of families and Head Start centers. Although specific strategies varied, *SESS* programs created multiple informal and formal opportunities for building trusting relations among *SESS* staff, host agency staff, and members of participating families. These opportunities were comprehensive, including mutual identification of needs, informal and formal consultation, group and individual services, educational and informational opportunities, and events that fostered social support among the families themselves.

While providing a steady level of support, care coordination facilitated ongoing assessment of service needs and family strengths, brokering of services provided by other agencies, and assistance to the client in meeting basic needs.

In summary, the *SESS* approach to service integration emphasized the interpersonal relations that lie at the interface between the service system and the families in need of those services. *SESS* sites shared key operating principles that promoted:

- *Family-centered* services that involved families in service planning and program governance, and recognized that effective systems for supporting the social-emotional development of young children required "a respectful partnership with families, even the most troubled families, as well as a willingness to address the concrete realities that these families face" (Knitzer, 2001:10);

- *Strength-based* approaches that identified and supported the many personal and cultural strengths that caregivers bring to their families, and not simply the needs that may require participation in treatment services. For example, some *SESS* providers used video tapes and observation of caregiver-child interactions as a strength-based approach that gave the providers an understanding of relationship between the caregiver and child, as well as a personalized intervention that had meaning to families; and

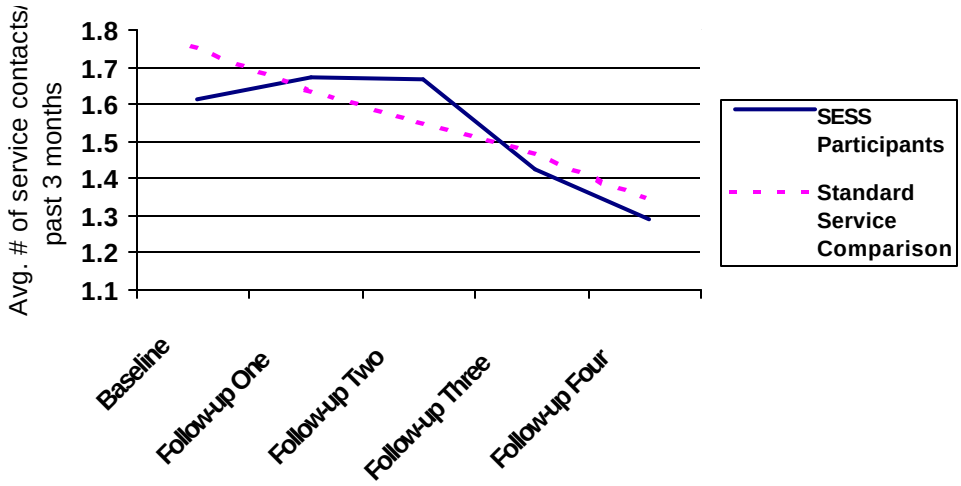
- *Culturally-appropriate* services and delivery that began with staff that shared the language and understood the cultures of participating families, and included engagement and delivery mechanisms that respected the cultural backgrounds and practices of families. In one site, for example, traditional tea ceremonies were incorporated into the interaction of care coordinators and recently immigrated families. In a program serving Native Americans, storytelling was incorporated as an important service strategy for preschool children. Care coordinators, often paraprofessionals, played a key role in assuring cultural appropriateness. They often worked closely with professional providers to assure cultural understanding and sensitivity.

Care coordinators working closely with families often identified basic needs, such as transportation, food and clothing, assistance with attaining housing, assistance in seeking employment, or assistance with unfamiliar application and paper work procedures. Exhibit 3 indicates that the *SESS* families reported initial increases in access and use of services to meet basic needs relative to comparison families. (The comparison families received the normal standard of care for their setting.) This finding

held across the first two follow-up points (approximately one year).[9] While this program effect was small, it is consistent with a strategy of responsiveness to family need to facilitate program engagement.[10]

Exhibit 3

Number of Basic Needs Service Contacts for all *SESS* and Comparison Families
***n* = 2,118**



Behavioral Health Services and Outcomes for Caregivers

The *SESS* sites used two general approaches for integrating designated behavioral health services for caregivers: direct service provision by *SESS* behavioral health specialists; or providing care coordination to help caregivers access and maintain services provided by an outside collaborating agency. The services for caregivers in *SESS* programs included prevention education about substance use and abuse; behavioral health and addiction assessments; support groups for caregivers in recovery; short-term and crisis counseling; family therapy; dyadic therapy; conflict resolution, education, and counseling; referrals for treatment and help with service access; and assistance in accessing necessary services.

When behavioral health service needs were serious, treatment needs necessitated referral to collaborating treatment providers. *SESS* staff worked with the family member and outside collaborative agencies to obtain appropriate services, and provided care coordination to facilitate continued use of those services.

[9] To identify the degree to which *SESS* families and comparison families participating in similar health care or early education settings accessed and utilized needed services, the *SESS* Steering Committee developed the Services Access and Utilization Scale (SAUS). The SAUS, a structured interview, included questions about the use of several relevant categories of services prior to program entry, and at four time points following the initiation of participation in *SESS* programs.

[10] Unless indicated otherwise, all reported differences between *SESS* participants and the comparison sample represent a statistically significant linear trend through all time points as determined through repeated measures MANCOVA analyses corrected through select covariates and propensity score adjustments for non-equivalence when appropriate.

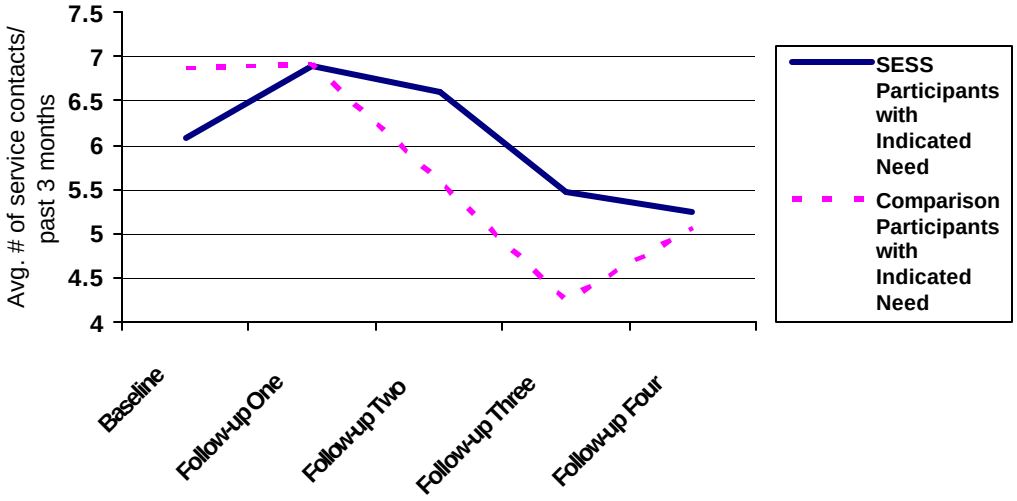
Access to Caregiver Substance Abuse Treatment Services

While substance abuse was not the most prevalent risk factor in families of participating children, it remained a highly negative influence when present. Effective assessment and support of treatment for substance abuse were critical when it was a factor in the family environment. Because program impacts in this area were only relevant for caregivers who had a need for treatment, the analysis of substance use outcomes included only those who were identified as potentially in need of substance use treatment services.[11] The overall trends displayed in Exhibit 4 show a statistically significant increase in service use by caregivers who were problem alcohol and drug users participating in SESS relative to comparison caregivers. While statistically significant, the difference in number of treatment contacts for families in SESS programs and comparison families were small, amounting to approximately one contact in the 3-month recall period at the third follow-up point.

Exhibit 4

Number of Substance Abuse Service Contacts for *SESS* and Comparison Families With Indicated Need for Services

***n* = 657**



Caregiver Substance Abuse Treatment Outcomes

Substance abuse is a particular issue in the primary care projects because of the importance of treatment for pregnant mothers. These projects often recruited expectant mothers and focused on substance use issues. Accordingly, larger proportions of participants in those programs were assessed with substance use problems.

SESS researchers measured self-reported substance use using the alcohol and drug severity scales of the Addiction Severity Index (McLellan, et al., 1980), a widely used instrument that includes questions about the use of a variety of substances. Exhibit 5 displays the trend lines in drug addiction for

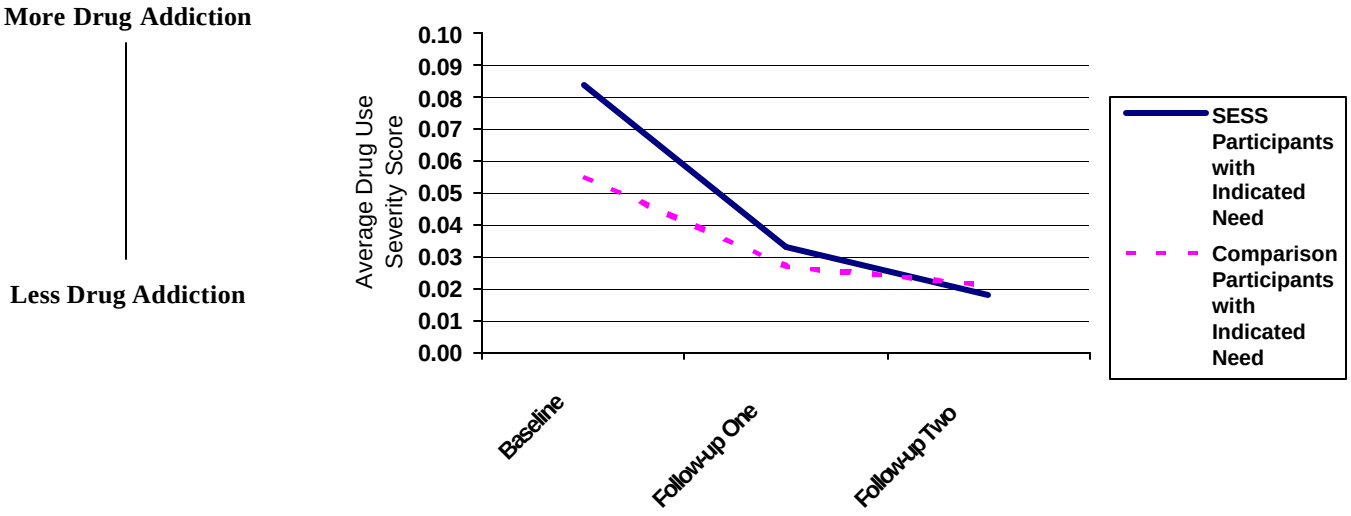
[11] The analysis team used latent class analysis as an empirically based method for identifying those caregivers who potentially had a need for substance abuse treatment. This procedure uses known predictors of substance use to mitigate the potential bias in relying on self-reported use only. For a complete discussion, see the *Final Report* and its appendices.

caregivers in *SESS* primary care programs found to have a potential need for substance use treatment. The figure demonstrates a sustained decline in drug addiction for *SESS* participants relative to comparison caregivers in need of treatment. Though differences between caregivers in *SESS* primary care programs and comparison caregivers were small in magnitude, they were statistically significant and consistent with the pattern of treatment access identified above.

Differences in drug addiction trends for program and comparison caregivers in early childhood sites were not significant; nor were differences in alcohol addiction significant in either setting. These patterns suggest that integrating effective caregiver substance abuse treatment into *SESS* programs requires the assessment and service intensity that was more attainable in the primary health care settings, and that was particularly focused on drug-involved mothers.

Exhibit 5

Caregiver Drug Addiction: Caregivers With Indicated Need for Services
***n* = 238**

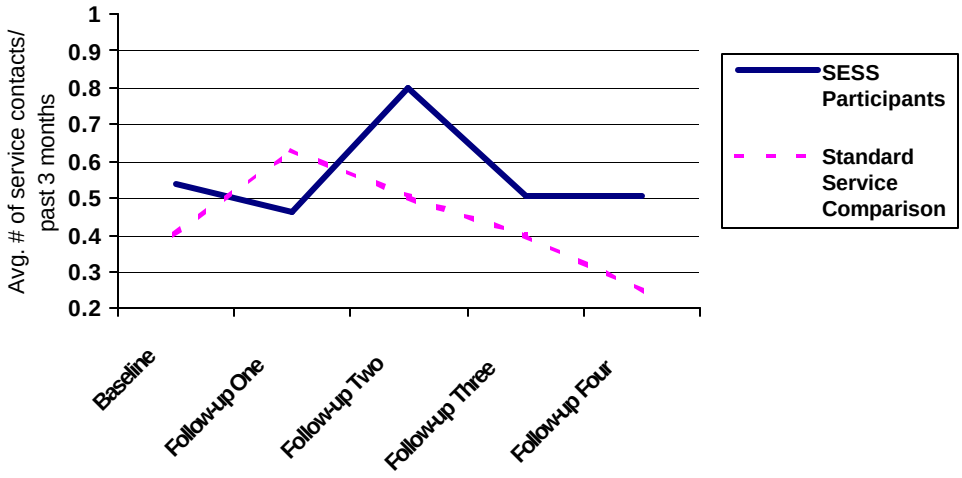


Access to Caregiver Mental Health Services

SESS family-centered care coordination was designed to build trust, and to support and encourage realization of needs for service. Mental health services are often perceived as stigmatizing, and many families are reluctant to disclose mental health needs without trust in the service provider. The pattern of the trend lines in Exhibit 6 demonstrates a delayed but statistically significant increase in access and use of mental health services by *SESS* caregivers relative to caregivers in the standard of service comparison group. While this trend is statistically significant, the amount of service contact and the magnitude of the difference between caregivers participating in *SESS* and comparison caregivers is small.

Exhibit 6

Number of Caregiver Mental Health Service Contacts for All *SESS* and Comparison Families
***n* = 2,118**



Caregiver Mental Health Outcomes

Although caregivers participating in *SESS* programs reported somewhat greater use of mental health services than comparison caregivers, no significant improvements in measured mental health status were identified for caregivers participating in *SESS* programs relative to comparison caregivers.[12] The apparent lack of impact on caregiver mental health as measured for *SESS* suggests that more focused, intensive efforts may be necessary to adequately meet the mental health needs of caregivers. While *SESS* projects included adult mental health in their intended scope of service integration, their staff expertise and resources emphasized other areas, such as family functioning and child mental health. Since mental health treatment was accessed largely through external providers, the availability, quality, and appropriateness of the services were shaped by external service delivery and support systems in each site. This finding suggests a need for additional attention to providing sustained, effective mental health services for caregivers in need.

Family Conflict Outcomes

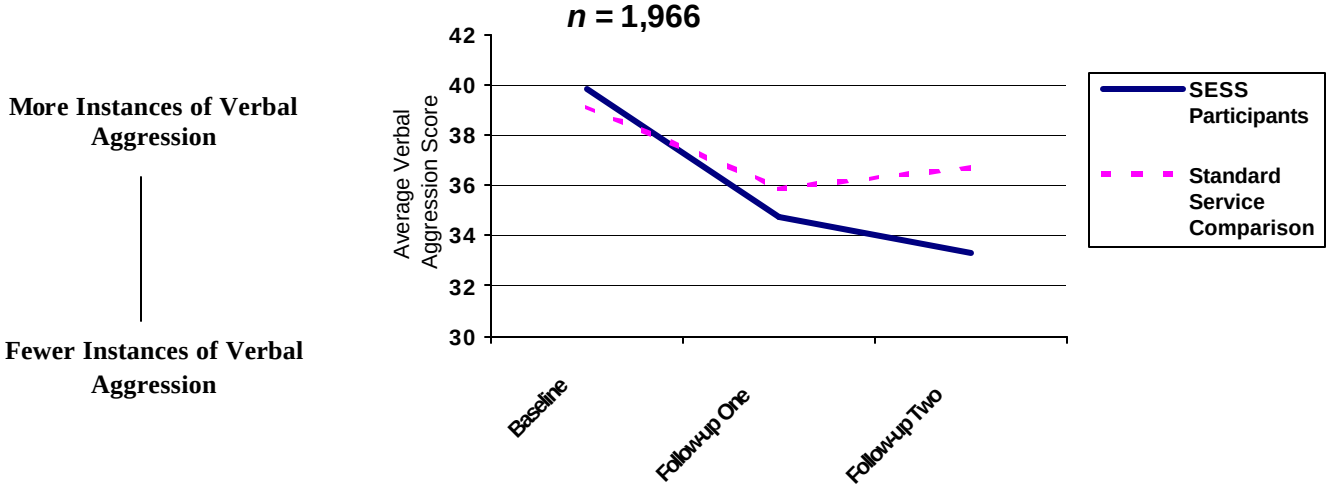
The Conflict Tactics Scale (Straus, 1979) was used to measure the level of verbal aggression between caregivers in the home environment of *SESS* study children. The scale items asked the caregiver to indicate the frequency of different verbal behaviors by the respondent and an adult partner in the home during the past year. Exhibit 7 compares the reported levels of verbal aggression for *SESS* and comparison caregivers with an adult partner in the home.

[12] For *SESS*, the mental health status of caregivers was measured using the total score of the Brief Symptoms Inventory (Derogatis, 1993).

Exhibit 7

Verbal Aggression: All Families

***n* = 1,966**



As indicated in the graph, *SESS* caregivers reported a sustained decrease in verbal aggression, while comparison families experienced an upturn in this form of conflict. These results were maintained for families that showed a particular need for services in this area. *SESS* projects were successful in working with caregivers to improve family dynamics and its impact on young children in a variety of ways, including education, support groups, counseling, and therapy.

Parenting and Home Environment Services and Outcomes

Interventions that are focused on strengthening the social-emotional and cognitive development of very young children must recognize that emotional problems in young children often can be traced to family caregiving environments. The *SESS* projects provided services designed to strengthen family environments in a variety of ways appropriate to their local populations and settings. In particular, caregivers were supported in improving their parenting skills, strengthening learning stimulation in the family environment, and interacting with children in more nurturing ways. *SESS* staff worked with caregivers to strengthen their understanding of child development, and make their expectations of themselves and their children more positive and appropriate.

In summary, *SESS* sites met family service needs in several ways through:

- *Parenting sessions* that provided education or skills development concerning parenting skills, knowledge of child development, improving the learning environment in the home, and nurturing interactions with children;

- *Sessions on family dynamics* designed to improve communication, family decision-making, conflict resolution, and other aspects of family functioning;

- *Family-focused events* that provided information and built support networks through regular meetings or special events; and

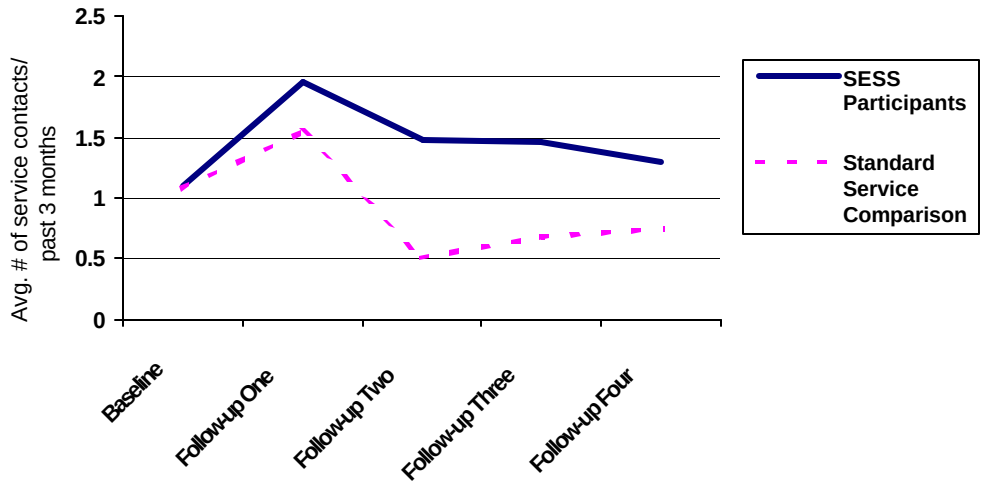
- *Family consultation, counseling, or therapy.*

Access to Family/Parenting Services

Increasing access and use of parenting services, both in group settings and in the home environment, was a major objective of the *SESS* program, and these services were largely delivered by *SESS* staff or sub-contractors in the *SESS* program setting. Exhibit 8 summarizes the numbers of parenting service contacts of *SESS* and comparison families throughout the study period. The trend lines indicate that *SESS* participants consistently accessed and utilized more parenting services across all follow-up time points as compared to study participants receiving the usual standard of care in their sites.

Exhibit 8

Number of Parenting Service Contacts for All *SESS* and Comparison Families
***n* = 2,118**



The family behavioral health services offered by *SESS* programs provided consultation and education concerning facets of the home environment with demonstrated importance for early child development.

Parental Stress

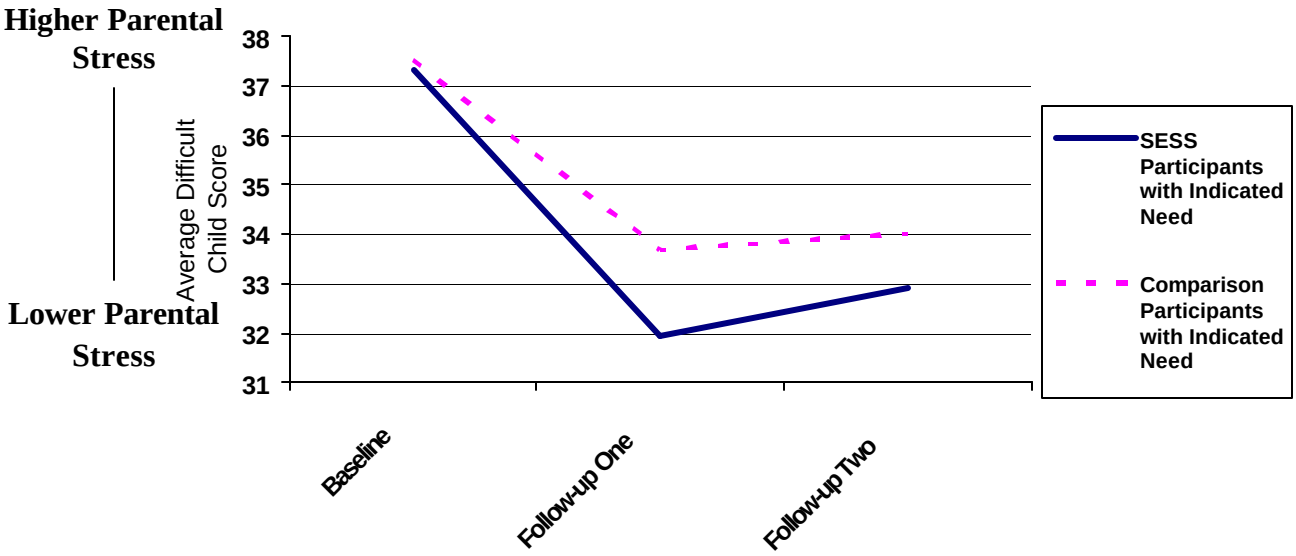
Caregivers who have low confidence in their parenting skills, who have unrealistic expectations about their parenting behaviors and the behaviors of their child, or who are experiencing other parenting or behavioral challenges exhibit higher levels of stress in relation to their child. Parenting stress has negative consequences for the quality of caregiver-child interactions. As indicated in Exhibit 9, for families that exhibited clinically high levels of parental stress, *SESS* caregiver perceptions that the study child was difficult to parent declined relative to comparison caregiver perceptions (as measured by the Parental Stress Index, Difficult Child Scale, Abidin, 1983). This reduction was statistically significant across all three measurement points.

Exhibit 9

Parenting Stress Index: Difficult Child Scale

Families With Indicated Need for Services

***n* = 404**



Caregiver-Infant Interactions

The family environment and parenting behaviors of the caregiver impact the social-emotional and cognitive development of children in different ways at different ages. For newborns and infants, positive interactions (e.g., nonverbal communication) with the caregiver are crucial to forming positive attachments, learning to communicate needs, and learning to be responsive to the caregiver. *SESS* primary care sites worked directly with caregivers to educate, model and support positive and nurturing communication between caregiver and their very young children during everyday interactions.

Caregiver and child interactions were measured using videotaped scenarios of feeding, teaching, and play scenarios. The Nursing Child Assessment Satellite Training (NCAST) instrument (Sumner & Speitz, 1996) was used to assess the degree of positive responsiveness of the caregiver to the child during feeding and teaching scenarios, and the National Institute for Child Health and Development (NICHD) scales (NICHD, 1993) were used to assess parent responsiveness during free play scenarios. All interaction sessions were videotaped and centrally coded by highly trained, certified, and multiethnic coders who could code sessions in the family's primary language (Spanish, Mandarin, and Haitian-Creole) when necessary.

Improvements in caregiver and child interactions for *SESS* participants relative to comparison participants were identified for infants at 6 and 12 month observations, and sustained improvements in positive interactions during free play were observed between 6 and 18 months for the two projects that worked most closely with caregivers and infants.[13] This pattern of outcomes is consistent with

[13] Interactions between caregivers and children were taped at 6 months, 12 months, and 18 months after baseline. Children in the infant video-tape scenarios were newborns at baseline. Several considerations recommended comparisons at each time point, in addition to an overtime trend analysis. Specifically, the data did not include a true baseline because the first measurement point was 6 months into the study and the developmental trajectories of different measures would lead us to expect a stronger impact on some scenario's (i.e., feeding) at 6 months, and on others (i.e., teaching and play) at 12 or 18 months. Since all treatment and comparison conditions in the participating sites were random, the cross-sectional analyses

developmental expectations, with the focus of interaction moving from feeding to teaching and play as the child gets older.

- At 6 months, *SESS* caregivers demonstrated more responsive interactions with the child during feeding relative to standard of service comparison caregivers (CFP & SAMHSA, 2001b). Feeding is a focal interaction during the first 6 months of life, and a primary setting for developing communication and attachment. The difference in feeding interaction was statistically significant, though there were no statistically significant differences between *SESS* and comparison caregivers in the NCAST teaching scale, or in the caregiver responsiveness as measured by the NICHD free play items.

- At 12 months, *SESS* caregivers were more positive in their interactions with their child during free play than comparison caregivers (CFP & SAMHSA, 2001b:14). The NICHD free play measure indicated greater sensitivity to child cues, stronger engagement, more stimulation of development, and stronger expression of positive feelings toward the child by *SESS* caregivers.

- As Exhibit 10 shows, the degree to which *SESS* caregivers were more responsive to their children during free play relative to comparison caregivers increased between 6- and 18-month observations. This difference in trend was statistically significant, and indicates a sustained program influence on caregiver interaction with children during free play. This statistically significant trend was found only for caregivers in the two projects that focused exclusively on infants. These programs emphasized the importance of play as an opportunity for positive interactions with children.

SESS programs worked directly with mothers and infants concerning the importance of positive interactions, how to accomplish them, and how to see the positive effects on infant and toddler development. They used a variety of techniques, including therapeutic groups (using the *Baby and Me* curriculum), family strengthening educational programs (using the *Strengthening Multi-Ethnic Families* curriculum (Steele, 1993), and small group and individual consultations. These focused sessions built on the strengths of the caregiver's interactions with their baby. *SESS* programs and staff placed high value on the positive nature of this work, the way it built on growing research knowledge about the importance of these early caregiver-infant interactions for child development, and the bonding that these activities produced between the participants, the staff, and the program.

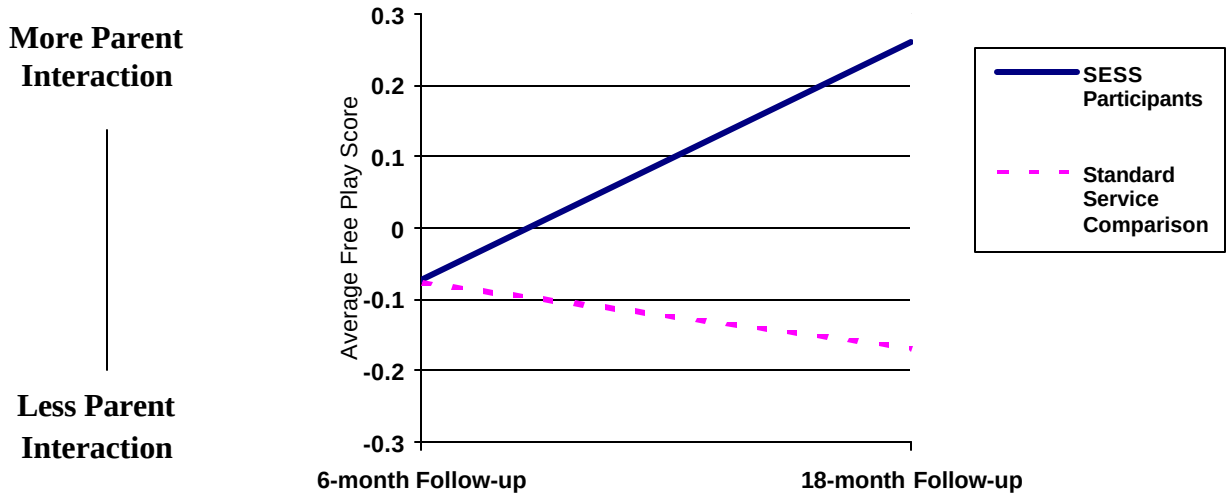
constitute a valid "post-test only" analysis design. Trend analyses provide evidence on whether improvements in interaction increase as the child ages. These overtime analyses are most meaningful for teaching or free play scenarios.

Exhibit 10

NICHD Parent Free Play Scale, Infant-Focused Sites

Mean Differences Between 6- and 18-month Data Collection Points

***n* =105**



Other Indicators of Family Well-being

Other positive findings concerning program benefits to family well-being were found in early stages of program implementation, but were not sustained throughout the study period, suggesting a need for continuing services to sustain improvement.

- Between the baseline and first follow-up, measures of parental discipline (using the Parental Discipline Methods Index) indicated increased use of appropriate discipline and positive reinforcement in *SESS* families relative to comparison families (CFP & SAMHSA, 2001b:11). These differences between *SESS* and comparison families were not sustained at statistically significant levels to the third measurement point when most families were no longer in the *SESS* projects.

- Measurement of the home environment using the HOME Preschool Observation Interview (Caldwell & Bradley, 1984) indicated an increase in learning stimulation in *SESS* homes relative to comparison homes (CFP & SAMHSA, 2001b:12). This difference was statistically significant from baseline to the first follow-up, but was not sustained at the final measurement point. Impacts on the home environment were strongest in projects that emphasized the delivery of services in the home through home visits.

Behavioral Health Services and Outcomes for Children

With respect to behavioral health services for children, "there is growing consensus that three types of preventive and early intervention services are needed: those focused on parents and children; those focused on consultation and training to child care providers, teachers, and others that work directly with the children and families; and those focused on screening and assessment" (Knitzer, 2001:10). *SESS* projects provided services in all three areas in ways that are appropriate for the ages of children in each site. Interventions varied across local projects, and included the following:

- Screening and assessments for developmental issues for infants and toddlers;
- Preventive interventions, such as classroom curriculum or classroom activities;
- Classroom and site-based observations and assessments of target children by *SESS* providers and by early childhood education staff who had been trained through *SESS* and/or worked cooperatively with *SESS* staff to identify problem behaviors and symptoms;
- Collaboration with teachers to develop and use effective approaches for addressing child behaviors and issues;
- Therapeutic sessions delivered on site, including group, individual, and family therapy; and
- Referrals to mental health or other providers in external agencies for children with acute needs.

Reflecting the comprehensive perspective that characterized *SESS*, the preventive services available to all participants served several purposes. The classroom strategies, for example, introduced material or activities intended to enhance child well-being, and also provided a way for *SESS* providers to familiarize themselves with the children, to observe their behavior in group situations, and to assess and support classroom approaches to problem behaviors. Children who needed further assessments or therapeutic interventions could also be identified through classroom activities. Additionally, *SESS* providers and early childhood staff shared a setting, which allowed for different perspectives on the behaviors exhibited by the children in the classroom. These services in support of child social-emotional development exemplified the *SESS* approach to directly weaving services into the daily experience of families and children in the *SESS* program and host setting.

Access and Use of Mental Health Services for Children

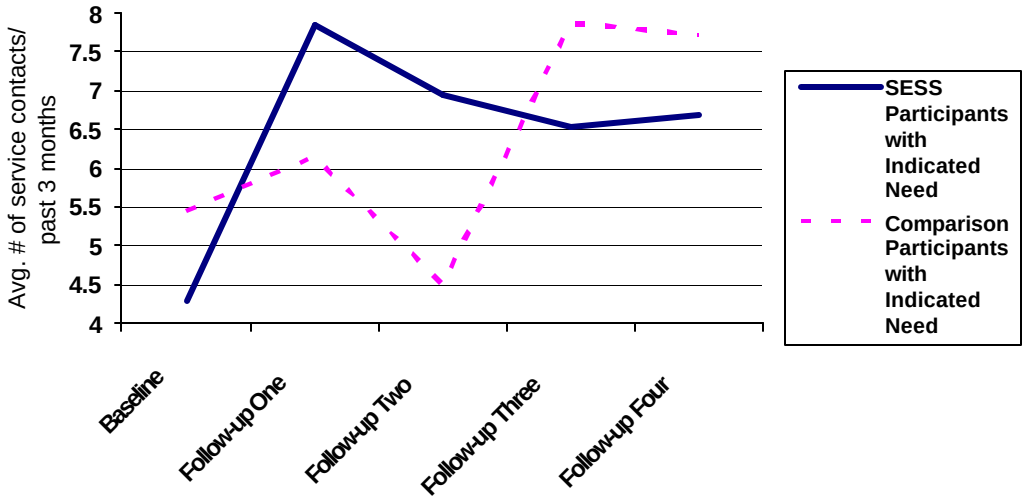
SESS families with children in potential need of services significantly increased their use of child mental health services relative to comparison families, particularly between baseline and the first follow-up measure. This increase after baseline may have reflected the emphasis that *SESS* projects placed on early identification of social-emotional issues for children. By the third follow-up (9 months to a year after baseline), the comparison families had caught up with *SESS* families in their use of mental health services. This pattern is shown in Exhibit 11, where children in potential need of behavioral health services increased service access relative to comparison children at the second and third time points, and then leveled off.

Exhibit 11

Number of Child Mental Health Service Contacts for

***SESS* and Comparison Children with Indicated Need for Services**

***n* = 851**



Outcomes for Children

One of the intended outcomes of the *SESS* program was to lay a more positive foundation of social-emotional and cognitive development for young children. *SESS* interventions incorporated the growing evidence that social-emotional development is an important contributor to school readiness and success (Ladd & Burgess, 1999; McCelland, Morrison, & Holmes, 2000; McEvoy & Welker, 2000), and that quality interventions can improve social-emotional development.

Social-Emotional Development For children 3 years of age and above, the *SESS* study measured social-emotional development using the Preschool and Kindergarten Behavioral Scales (PKBS) (Merrell, 1996). The measure included both caregiver and teacher rating scales that assess externalizing problem behaviors (e.g., acting out), internalizing problem behaviors (e.g., withdrawal), and social skills. As Exhibit 12 displays, in teacher ratings of preschool classroom behavior, *SESS* children of preschool age demonstrated a decreased incidence of both internalizing and externalizing problem behaviors relative to comparison children. The positive effect for *SESS* children relative to comparison children was sustained through the third measurement point when many of the children were no longer in *SESS* classrooms.

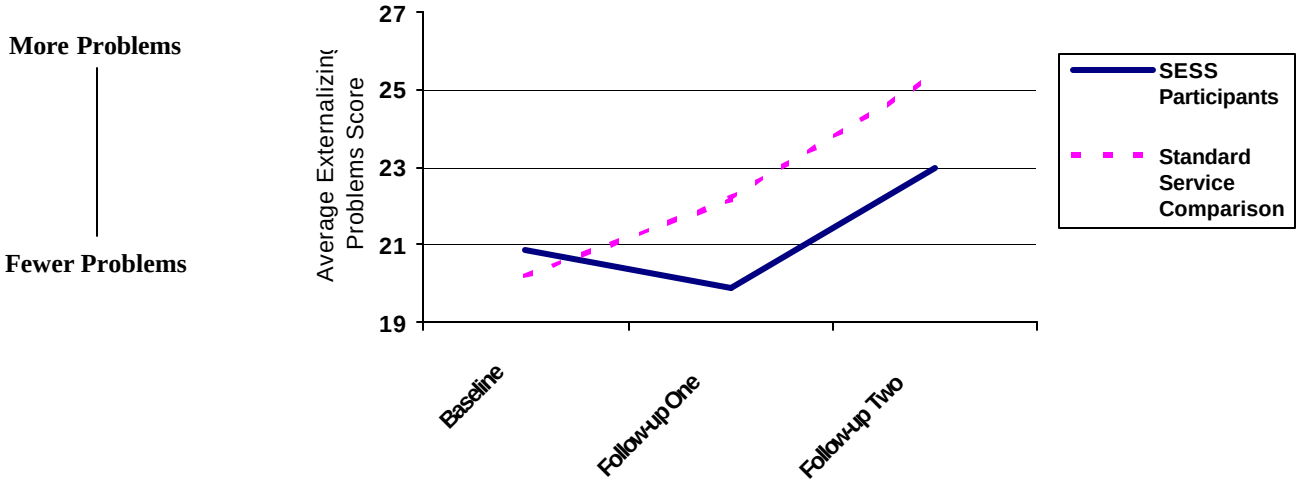
Exhibit 12

Externalizing and Internalizing Problems: All Families

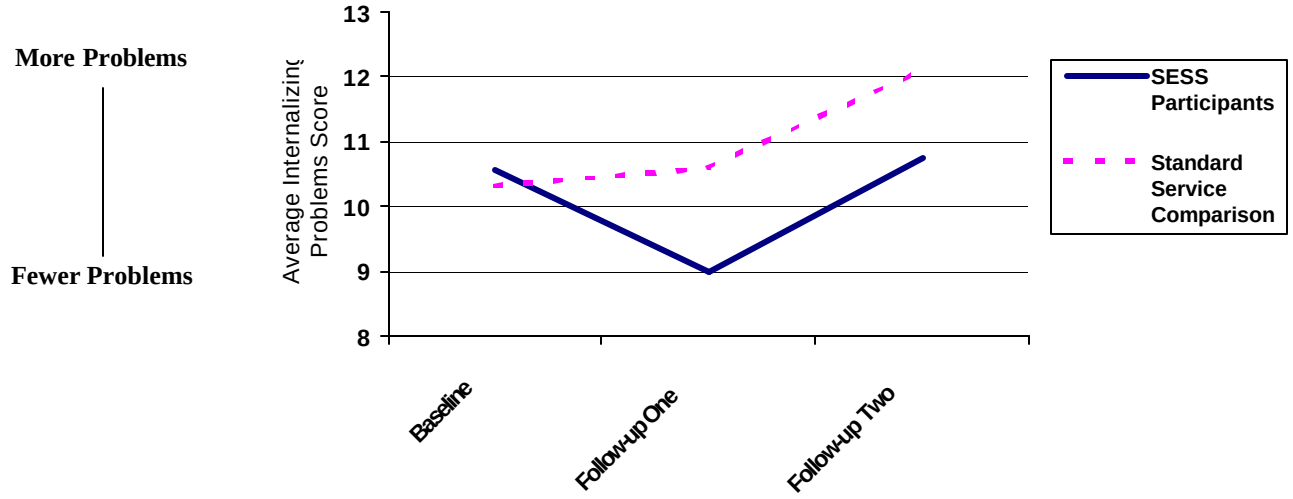
As Perceived by Preschool Teachers

***n* = 996**

Externalizing Problems



Internalizing Problems



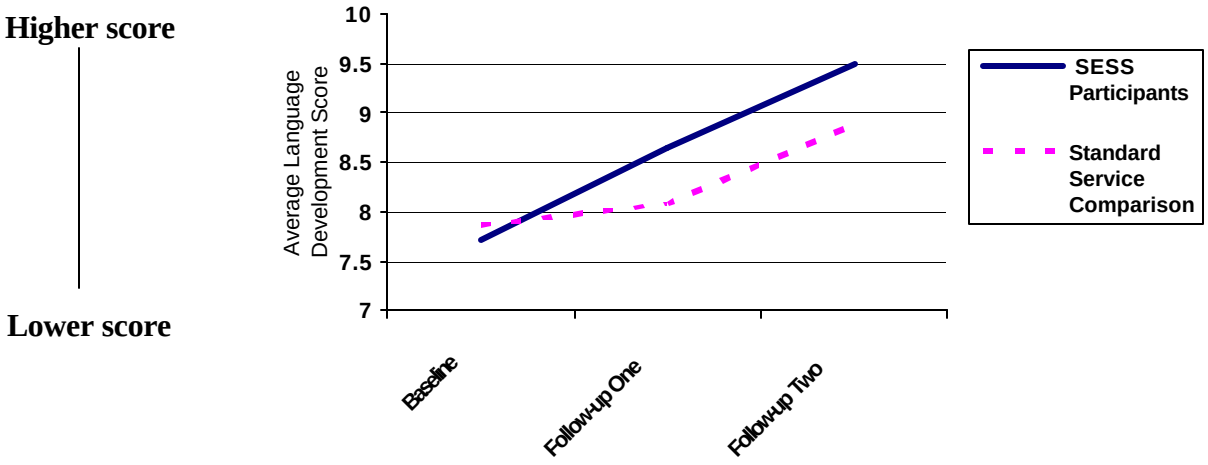
Cognitive Development. Cognitive development among preschoolers was measured using the Clinical Evaluation of Language Fundamentals for Preschoolers (CELF-P) (Wiig, Secord & Semal, 1992). The CELF-P is a diagnostic tool measuring language concepts and sentence recall. *SESS* children experienced a steeper sustained rise in the mastery of language concepts than did comparison children who did not benefit from the augmentation of their preschool environment through *SESS* interventions.[14]

[14] The CELF-P is appropriate only for monolingual, English-speaking children as a measure of school readiness and was therefore not administered at one *SESS* site.

As indicated in Exhibit 13, the stronger language development of *SESS* children was statistically significant, and a promising result with respect to school and reading readiness.

Exhibit 13

Language Development: All Families
***n* = 840**



Conclusion

In summary, the *SESS* program produced many encouraging results with respect to its intended goals. Most importantly, the program showed evidence of benefiting the social-emotional and cognitive development of infants and young children, an accomplishment that strengthens the essential foundation for continued positive social development and school success. Relative to children in comparison families, preschool children improved in their social-emotional and cognitive development. These child outcomes were measurable even shortly after initiation of the intervention.

Gains in service use and outcomes were generally more evident in the parenting, family environment, and child development areas in which *SESS* programs wove a variety of services directly into the participants' daily experience in the *SESS* program and the host settings. Relative to comparison caregivers, SESS caregivers showed decreases in verbal aggression, reductions in parental stress, more responsive interactions with their infants, and among those with problem drug use, greater reductions in drug addiction.

Outcomes for caregiver behavioral health, which relied more on traditional referral to treatment strategies, produced less widespread evidence of positive impact. This suggests the importance of *SESS*'s core strategies for engaging and serving families and children in familiar settings. It also suggests the need for stronger behavioral health service delivery and support systems to meet the needs of caregivers. The emphasis on interactively and intensively working with families in familiar settings is what makes the *SESS* approach to services different. As the discussion and examples in this report demonstrate, the capacity to work interactively, intensely, and effectively with families was developed in several major ways.

- *SESS* programs placed staff teams with complementary capabilities in the early childhood and health care settings that were familiar to families. These teams formed work groups with host

setting staff, and infused the setting with activities focusing on caregiver behavioral health, family environment, caregiver-child interactions, and child-emotional development.

- *SESS* programs created multiple opportunities for both formal and informal interactions between families (caregivers, target children, and other members). These opportunities extended beyond *SESS* staff and *SESS* families, to include host setting staff, and opportunities for social and supportive interactions between participating families themselves. If necessary, these interactions included home visits.

- *SESS* staff and work groups mixed paraprofessional staff who typically focused on working closely with family members, and professional staff who meet specific service needs. This aspect of teaming is important to ensure that families have the ongoing support and involvement that is central to *SESS*.

- *SESS* provided continuing consultation and training to host setting staff to increase their awareness and skills in caregiver behavioral health, family environmental issues, and child social-emotional development.

As a result of these strategies, *SESS* programs brought ongoing interactive consultation, education, training, therapy, and support into the health and early childhood settings that were familiar to parents. To further specify the potential of the *SESS* approach for helping a variety of communities strengthen families, the *SESS* collaborative has worked with the RAND Corporation to identify a range of strategies and variables that could be used in future studies to determine the cost-effectiveness of this intervention.[15]

SESS and similar early intervention programs (ACYF, 2002; Knitzer, 2002) are demonstrating that it is possible to engage families of young children at risk, build on their strengths, support their victories over challenges, and build stronger environments for children. Behavioral health services for caregivers, families, and children can be integrated into the daily activities of primary health care and early childhood settings. Access to and use of caregiver, child, and family services can be increased. The well-being of families, and therefore their nurturing and supportive influences on their youngest members, can grow, and the infants, toddlers, and children nurtured by these strengthened families and classrooms can benefit in their early development. The *Starting Early Starting Smart* program results produced important lessons on how this can be done. The *SESS* experience supports the value and importance of integrating family-centered and behavioral health services into welcoming settings such as primary health care and early childhood settings.

[15] See Karoly, L.A., Kilburn, M.R., Bigelow, J.H., Caulkins, J.P., and Cannon, J.S. (2001). *Assessing Costs and Benefits of Early Childhood Intervention Programs: Overview and Applications to the* Staring Early Starting Smart *Program.* Publishers: Seattle: Casey Family Programs; Santa Monica: RAND.

References

Abidin, R.R. (1983). *Parenting Stress Index Manual.* Charlottesville, VA: University of Virginia Press.

Administration on Children, Youth, and Families, Head Start Bureau, Department of Health and Human Services. (2002). *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start – Executive Summary.* Washington, DC: Department of Health and Human Services.

Bowman, B., Donovan, M.S., & Burns, M.S., eds. (2001). *Eager to Learn: Educating Our Preschoolers.* Washington, DC.

Caldwell, B. M. & Bradley, R. H. (1984). *Manual for the Administration of the HOME*. University of Arkansas.

Casey Family Programs & the U.S. Department of Health and Human Services (2001a). *The SESS Story*. Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Casey Family Programs & the U.S. Department of Health and Human Services (2001b). *Starting Early Starting Smart: Summary of Early Findings*. Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Casey Family Programs & the U.S. Department of Health and Human Services (2001c). *Key Guide Points for Partnering with Families.* Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Derogatis, L. (1993). *BSI: Brief Symptom Inventory*. National Computer Systems, Inc., U.S.A.

Hanson, L., Deere, D., Lee, C., Lewin, A., & Seval, C. (2001). *Key Principles in Providing Integrated Behavioral Health Services for Young Children and Their Families: The Starting Early Starting Smart Experience.* Washington, DC: Casey Family Programs & the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Knitzer, J. (2001). *Building Services and Systems to Support the Healthy Emotional Development of Young Children: An Action Guide for Policymakers (Promoting the Emotional Well-Being of Children and Families Policy)*. New York: Columbia University.

Knitzer, J. (2002). *Building Services and Systems to Support the Healthy Emotional Development of Young Children (Promoting the Emotional Well-Being of Children and Families Policy Paper No. 1)*. New York: Columbia University.

Ladd, G. W. & Burgess, K. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development,* 70(4), 910-929.

McClelland, M.M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly,* 15(3), 307-320.

McLellan, A.T., Luborsky, L., O'Brien, C.P., Woody, G.E. (1980). An improved diagnostic instrument for substance abuse patients: The Addiction Severity Index. *Journal of Nervous and Mental Disorders,* 168: 26-33.

McEvoy, A. & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional and Behavioral Disorders,* 8(3), 130-140.

Merrell, K.W. (1996). Social-emotional assessment in early childhood: The Preschool and Kindergarten Behavior Scales, *Journal of Early Intervention,* 20(2), 132-145.

NICHD Early Child Care Research Network (1993). *NICHD Mother-Child Interaction Scales*. Unpublished manuscript, University of Texas.

Shonkoff, J. & Phillips, D. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington DC, National Research Council and Institute of Medicine.

Steele, M. (1993). Strengthening Multi-Ethnic Families Curriculum. Los Angeles, CA.

Straus, M. A. (1979). Measuring intra family conflict and violence: The Conflict Tactics Scale, *Journal of Marriage and Family,* 41, 75-88.

Sumner, G., & Speitz, A. (1996). *Caregiver-Parent/Child Interaction Teaching Manual*. Seattle, WA: NCAST Publications, University of Washington.

Sumner, G., & Speitz, A. (1996). *Caregiver-Parent/Child Interaction Feeding Manual*. Seattle, WA: NCAST Publications, University of Washington.

U.S. Bureau of the Census (2000). Summary File 1. Washington, DC.

Wiig, E., Secord, W., & Semal, E. (1992). *CELF-P: Clinical Evaluation of Language Fundamentals-Preschool*. The Psychological Corporation, U.SA.

Appendix

Starting Early Starting Smart Sites and Contact Information

Study Site	Principal Investigator	Project Director	Local Researcher	Contact Information
Data Coordinating Centers				
EMT Associates, Inc. Folsom, CA	Joël Phillips, B.A.	J. Fred Springer, Ph.D.	J. Fred Springer, Ph.D. Elizabeth Sale, Ph.D.	esale@emt.org
Policy Research, Inc. Bethesda, MD	Irene Jillson, Ph.D.	Irene Jillson, Ph.D.	Irene Jillson, Ph.D.	irene@policy-research.org
Primary Care Sites				
Boston Medical Center Boston, MA	Carolyn Seval, R.N., M.P.H., L.M.H.C.	Ruth Rose-Jacobs, Sc.D.	Ruth Rose-Jacobs, Sc.D.	rrosejac@bu.edu
The Casey Family Partners Spokane, WA	Christopher Blodgett, Ph.D.	Mary Ann Murphy, M.S.	Christopher Blodgett, Ph.D.	murphym@inhs.org
The University of Miami Miami, FL	Connie E. Morrow, Ph.D.	K. Lori Hanson, Ph.D.	Emmalee S. Bandstra, M.D. April L. Vogel, Ph.D.	lhanson@med.miami.edu
The University of Missouri Columbia, MO	Carol J. Evans, Ph.D.	Robyn Boustead, M.P.A.	Carol J. Evans, Ph.D.	mzbousr@mail.dmh.state.mo.us
The University of New Mexico Albuquerque, NM	Andrew Hsi, M.D., M.P.H.	Bebeann Bouchard, M.Ed.	Richard Boyle, Ph.D.	bbouchard@salud.unm.edu
Early Childhood Sites				
Asian American Recovery Services, Inc. San Francisco, CA	Davis Y. Ja, Ph.D.	Davis Y. Ja, Ph.D.	Davis Y. Ja, Ph.D.	dja@compuserve.com
Child Development, Inc. Russellville, AR	JoAnne Williams, M.Ed.	Carol Amundson Lee, M.A., L.P.C.	Mark C. Edwards, Ph.D. LeAnne Whiteside-Mansell, Ed.D.	clee@childdevinc.org
Children's National Medical Center Washington, DC	Jill G. Joseph, M.D., Ph.D.	Amy Lewin, Psy.D.	Amy Lewin, Psy.D.	alewin@cnmc.oeg
Johns Hopkins University Baltimore, MD	Philip J. Leaf, Ph.D.	Jocelyn Turner-Musa, Ph.D.	Philip J. Leaf, Ph.D.	pleaf@jhsph.edu
Division of Child and Family Services Las Vegas, NV	Christa R. Peterson, Ph.D.	Laurel L. Swetnam, M.A., M.S.	Margaret P. Freese, Ph.D., M.P.H.	mpfreese@dcfs.state.nv.us
The Tulalip Tribes Beda?chelh Marysville, WA	Linda L. Jones, B.A.	Linda L. Jones, B.A. Tamara Williams	Claudia Long, Ph.D.	tamaralynn54@hotmail.com
The Women's Treatment Center Chicago, IL	Jewell Oates, Ph.D.	Dianne Stansberry, B.A., C.S.A.D.P.	Victor J. Bernstein, Ph.D.	vbernste@midway.uchicago.edu